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A TEST-APPARATUS FOR MONKEYS

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A TEST-APPARATUS FOR MONKEYS*

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A testing-unit which incorporates all the features that have seemed to the authors to be most desirable in testing monkeys, and which eliminates most of those features deemed undesirable, was constructed for the University of Wisconsin Primate laboratory in March, 1938.

The apparatus consists (cf. figure 1) of two main parts: a test-chamber and an attachable panel-holder, which provides tracks for sliding-panels used in testing.

A brief description of the apparatus follows:²

(a) Test-Chamber.

The test-chamber is a cube approximately 2 ft. in all dimensions. Its frame was made of $\frac{1}{8}$ in. angle-iron with 1 in. flanges, while the sides and top were constructed of $\frac{1}{4}$ in. iron bars in a frame of the same angle-iron and spaced $1\frac{1}{2}$ in. center to center. The top is solidly welded to the frame, but the sides are removable and slide in grooves provided on the frame of the chamber.

At the front of the cage, the two uprights of the frame rise about two feet above the top of the test-chamber, providing a channel for a movable counterbalanced screen operated by a rope and pulleys. The entire test-chamber is elevated about 2 ft. from the floor by 4 pieces of angle-iron which continue upward to form the sides of the frame of the chamber.

The four sides, including the back and the front of the cage, are removable. They measure about 2 ft. square, are interchangeable, and may be inserted so that the bars are

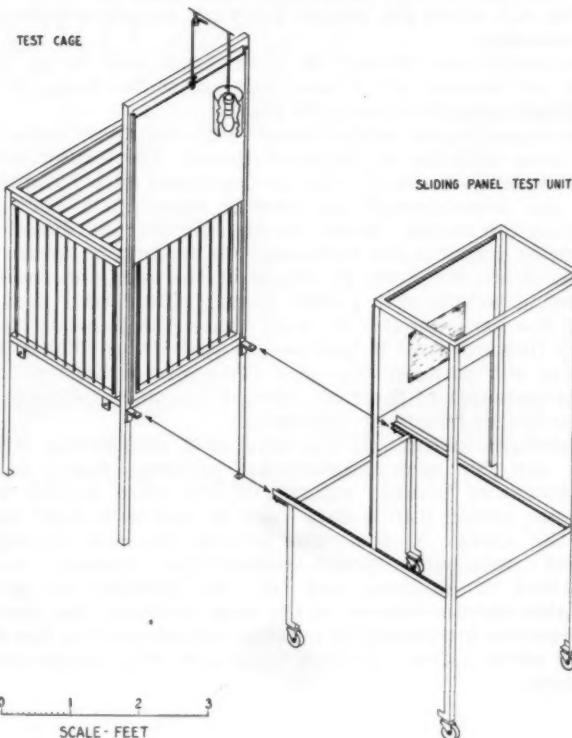
* Recommended for publication by Dr. B. F. Skinner, December 10, 1938.

¹ The apparatus described in this article is not revolutionary in design, but is modeled with some changes after units previously in use at the Wisconsin Primate laboratory. Special acknowledgments for ideas utilized in the preparation of this apparatus are due Dr. Paul H. Settlage and Dr. Walter F. Grether. The primary purpose of publication of this article is that of simplicity of future reference.

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² A detailed description of the apparatus, suitable for supplying all information relative to construction, has been prepared and will gladly be supplied upon request.

FIG. 1
A TEST-APPARATUS FOR MONKEYS



either vertical or horizontal. Also 2 ft. square is the removable wooden bottom of the cage, which fits into place under the angle-irons forming the base of the cage frame. The bottom was made of $\frac{3}{4}$ in. oak flooring.

(b) Panel-Holder.

The chamber is so made that the illustrated panel-holder can be attached to the front. The panel-holder, of angle-iron construction, consists essentially of 2 pairs of uprights supporting a 3-ft. track on which the sliding-panels move and a second screen which can be interposed between the

experimenter and the animal at work. The legs of the panel-holder, unlike those of the test-cage, are fitted with casters.

To provide for the screen, 2 additional uprights were erected just above the tracks. They are braced at their tops by cross-bars.

The tracks are formed of $\frac{1}{4}$ in. brass rods 36 in. long, which are welded to the inner and horizontal flange of the lengthwise angle-irons of the holder.

The experimenter seats himself with his knees under the rear lower cross-bar of the panel-holder. The sliding panels, 24 in. wide from side to side, are equipped with handles, so that the experimenter can readily move them back and forth on the tracks. Before he charges the food-boxes and otherwise prepares the apparatus for testing, he lowers the screen of the test-cage by means of the rope and counter-balancing weight at his side. Usually the screen is raised when the experimenter is ready; then the panel is moved slowly forward until it touches the cage front. The animal reaches out between the bars (arranged either vertically or horizontally) of the front side of the cage and opens the choice-box or otherwise responds.

Important features of the apparatus include the following: (a) the open construction prevents much of the excitement of monkey subjects which often results when they are forced into a dark cage or one with solid walls; (b) the design of the cage permits the use of any of several detachable panel-holders for testing various capacities or abilities, and (c) the provision of several available entrance-doors to the cage prevents the forming of responses influenced by postural adjustments to the door, which often appear in early trials and with inexperienced subjects.

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